

SYNTHESIS OF PROGRESSIVELY-VARIANT TEXTURES AND APPLICATION TO ARBITRARY SURFACES

ABSTRACT OF THE DISCLOSURE

Methods for synthesizing progressively-variant textures based on texton masks are provided. A first method creates a synthesized texture image guided by a sample texture, first texton mask corresponding to the sample texture and a second texton mask modified based on the first texton mask. A second method also creates a synthesized texture image guided by a first and second sample textures and corresponding first and second texton masks. A method for rendering a synthesized texture on an image of a three-dimensional object includes creating a synthesized texture on the object guided by a two-dimensional progressively-variant sample texture, a texton mask for the sample texture and a mesh of a plurality of vertices representing the object.